Industry Sector Analysis Telecommunications Market Analysis September 2005

Summary

Brazil has the largest telecommunications sector in Latin America. In 2004 the sector generated revenues of approximately \$ 35.6 billion, a 23 percent increase as compared to previous year. Services, including carriers, accounted for \$27.8 billion of net revenue, while product suppliers (hardware & software) have generated \$6.8 billion.

Best prospects include: next generation networks (NGNs), new services designed to reduce customer churn, broadband multiple services (evolving from traditional telephony services such as Integrated Services Digital Network (ISDN) - Circuit Data - Voice Over Internet Protocol (VoIP) - Intelligent services network), new services that merge voice, data, image and sounds, telemedicine equipment, security telecom equipment (alarm receivers and transmitters), system integration services.

Market Overview

Despite the results of currency instability, Brazil remains the largest telecommunications market in Latin America, accounting for almost 35 percent of the region's revenues. Net revenue for telecommunications equipment and services in 2004 was approximately US\$ 35.6 billion, a 23 percent increase as compared to 2003 (US\$ 27 billion of net revenue).

Total revenues for the sector can be divided as follows: fixed carriers 41.2 percent; mobile carriers 25.3 percent; manufactured products 19.5 percent and services 14.0 percent.

According to Anatel, Brazilian Telecommunications Body, in December 2004 Brazil had approximately 70 million cellular telephones in service, 80.5% of which were prepaid. This represents a 41 percent growth as compared to the same period in 2003. For each group of 100 inhabitants the number of cellular telephones went from 26.0 in 2003 to 36.6 in 2004.

By the end 2005 Anatel predicts that the total investments in the telecommunications sector in Brazil will reach \$ 64 billion; 47 percent of this amount will be for fixed services and 19 percent for mass communications services.

In the **fixed line** market, there were 39.5 million phones installed at the end of 2004 a marginal increase from the 39.1 million at the end of 2003.

Broadband is heating up but the total penetration in country is still 8%. For complete information about the Broadband market in Brazil please visit http://www.BuyUSA.gov/ and access the market research report: *Broadband in Brazil*.

Voice over the Internet Protocol (VoIP): There is rapid expansion of the market for VoIP services in Brazil. This expansion, coupled in technology upgrades in the industry, in turn, will lead to a surge in demand for newer VoIP equipment that, at least for the short-term, could be supplied almost exclusively by US firms.



Currently there are approximately 30 small telecom carriers offering VoIP services. For detailed information on this subject please visit http://www.BuyUSA.gov and access the market research report: VoIP Equipment & Services in Brazil.

Trends – Wireless Mobility is Driving Growth

For 2005 sector experts predict an average growth of 11 percent. The Brazilian import market for telecommunications equipment and components reached approximately US\$1,5 billion in 2004 and is expected to surpass US\$ 2.2 billion in 2005. The US decreased its participation in the import market from 34 percent in 2003 to 27 percent in 2004, while the Southeast Asian countries (mostly South Korea and China) increased their participation from 34 percent in 2003 to 42 percent in 2004.

Wireless penetration continues to grow...

According to Anatel, in December 2004 Brazil had approximately 70 million cellular telephones in service. This represents a 41 percent growth over the same period last year. The country could reach 80 million users by year-end 2005. About 81 percent of the mobile phones operating in the country are prepaid and 19 percent are post paid. There are an estimated 42.8 telephones per 100 inhabitants, a 38 percent growth over the prior year.

Vivo (CDMA/TDMA) is the largest mobile operator with 39.2 percent of the total market, followed by TIM (TDMA/GSM) with 21.4 percent, Claro (TDMA/GSM) 20.7 percent, Oi (GSM) with 10.5 percent and other companies such as Telemig/Amazonia and Brasil Telecom (TDMA/GSM) with 8.0 percent. Brazil's

GSM and CDMA client bases are growing at an average monthly rate of 9.8 percent and 2.4 percent respectively.

US companies should be aware that, while CDMA has a narrow lead in market share over GSM, in the recent past Anatel's interpretations of spectrum use and flexibility have explicitly favored the concept of privileging GSM nationwide. While some technology neutrality has been preserved, the Brazilian Government has appeared to favor the European approach of investing in a single standard in order to speed up adoption and ease roaming. The results of this strategy have, in recent years, put over US\$ 1 billion in wireless investments at risk in Brazil, and the US government continues to monitor developments with concern.

On the other hand, Anatel is planning to auction the licenses of the 3G for the first half of 2005. This could represent good opportunities for US companies since significant increase of wireless data applications is expected with the deployment of 3G. Trends continue to be toward convergence, i.e., adding telecommunications services, in order to maximize the benefits derived from investments and efficient operations.

Many multinational players such as Motorola, Nokia, Nortel, Cisco established manufacturing plants in this country to provide products and services to major operators that set up new businesses. As a result, the country today has a telecommunications infrastructure that matches top standards in Latin America.

Broadband is heating up but the total penetration in country is still only 8%. In July, fixed line operator Telefonica announced investments of US\$ 21 million to promote its broadband service, which is marketed under the Speedy brand. One salient feature of the Brazilian market that may be hampering faster broadband growth is the lack of actual competition in the sector. Currently, the three incumbents Telefonica, Telemar and Brasil Telecom- control 80 percent of the market, and only one mirror operator, GVT, has been able to establish a meaningful broadband presence. The incumbents use the near-monopoly control of local access, in their respective regions, to the detriment of their competitors.

VoIP: Phenomenal growth in Internet based services, along with the desire among the corporate market and consumers to cut telecommunications costs, is leading to vast expansion in the market for Voice over Internet Protocol (VoIP) services in Brazil. This expansion, coupled in technology upgrades in the industry, in turn, will lead to a surge in demand for newer VoIP equipment that, at least for the short-term, can be supplied almost exclusively by US firms.

Statistical Data

US\$ millions	2004	2005 est*	2006 est*
Market Size	\$5,114	\$5,765	\$6,300
Local Production	\$3,594	\$3,557	\$3,849
Exports	\$1,334	\$1,142	\$1,268
Imports (Global)	\$1,520	\$2,208	\$2,451
Imports from US	\$410	\$596	\$662

Refers to size of telecom equipment market Exchange rate of R\$ 3.00/US\$ 1.00. Statistical data are unofficial estimates from trade sources *2005/2006figures are estimates.

Top Prospects for US Companies in Wireless

Good opportunities for U.S. companies will be found in the wireless market since a significant increase of wireless data applications is expected with the deployment of the 3G licenses, scheduled to be auctioned by Anatel in the first half of 2006. Trends continue to be toward convergence, i.e., adding telecommunications services, to maximize the benefits derived from investments and efficient operations.

Cellular telephones are expected to be the single biggest enduse market for the telecommunications equipment market in Brazil. Major cell phone manufactures such as Motorola, Nokia, Samsung, Sony-Ericsson, Siemens, LG Electronics and Gradiente are gearing up production to supply growing markets in Brazil and the South American Region and are even exporting to North America. Other best prospects include IP New Generation Networks (IP NGNs); Corporate and Virtual Private Network Services (VPNs); new revenue-generating mobile services (preferably based on the existing network); broadband multiple services; intelligent services networks; new services merging voice, data, image and sounds; telemedicine equipment; security telecom equipment (alarm receivers and transmitters); and system integration services.

Market Access

Advanced technologies and high quality products are always excellent entries for multinational telecom companies in Brazil's market, but this does not necessarily mean that it will be easy for foreign companies to export to Brazil. Before entering the market, a foreign company has to observe and address issues including: law and policy changes, forced technology transfer, and certification of products. The average import duty for telecommunications equipment is 15-17 percent, but this amount may go down to zero in cases where Brazil does not manufacture similar products. There is also a federal tax on industrial products (IPI), with an average of 4 percent, and an average State Sales Tax (ICM) of 18 percent. Local manufacturers also pay the IPI and state sales taxes.

Certification of Products: ANATEL has released a list of accredited laboratories that will perform tests required for the assessment of telecommunications products. Renewal of current and prior certificates will be granted only after testing by the OCDs to make sure they comply with ANATEL rules. For detailed information on this subject, please visits http://www.BuyUSA.gov and access the document: Brazilian Accredited Laboratories for Telecom Equipment

Technology Transfer: Less dependence on telecom imports has been a longstanding goal of the Brazilian Government. Brazil's initiatives in international cooperation are all aimed at developing its own national industries and reducing imports where possible.

Non-tariff trade barriers: Non-tariff barriers such as procurement policies and technical standards can still make importing difficult. Government and industry can be expected to put hurdles in the way of foreign telecom vendors' exports to Brazil in order to develop their own market. Foreign suppliers should always remember the primacy that the government places on local production, and should look at to licensing and/or joint venture options to counter non-tariff barriers.

Import Costs: All imports in Brazil are subject to a number of taxes and fees, which are usually paid during the customs clearance process. There are four main taxes that account for the bulk of importing costs:

Import duty: this is a federal tax levied on foreign products that enter Brazilian territory and is calculated on top of the CIF value. For the electronic security equipment, import duty ranges from 2 to 20 percent depending on the product. The average duty rate is 15 percent.

Industrial Products Tax (IPI): this is a federal tax levied on both domestic and imported manufactured products. It is assessed at the point of sale by the manufacturer in the case of domestically produced products, but at the point of customs clearance in the case of imports. The IPI is calculated on top of the CIF value plus import duty. The IPI for electronic security equipment varies from 10 to 20 percent.

Merchandise Circulation Tax (ICMS): is a state government value-added tax, applicable to both imported and domestic products. The ICMS tax on imports is assessed over the CIF value, plus import duty, plus IPI as its calculation base. The ICMS rate varies among states. In the state of São Paulo it is 18 percent, but in most states it is 12 percent.

PIS and Cofins: these are new fees that were implemented in April 2004 and are applicable to both domestic and imported products and services. They are calculated cumulatively and in an extremely complex way. In general, the total effect of these fees sums up to approximately 12.63 percent of the CIF.

Brazilian manufacturers must also pay the above taxes, but American companies should keep in mind that, as the taxes are calculated in a compounding manner over the CIF value plus the import duty, the overall IPI, ICMS, PIS and Cofins of an imported product will be significantly higher than that of a locally manufactured product. Also, one should not forget that when distributors and trading companies sell the product, they price to be compensated for those taxes collected at the time of import.

Distribution and Business Practices

Brazilian and foreign companies as well as their products must be pre-qualified to bid on government procurements. This qualification addresses both technical and financial capabilities and must be reestablished with each bid submitted by a private company. Generally, these pre-qualifications are available in supplier application forms or public bid documents generated by each government entity. The criteria vary among government entities according to their specific standards and applications, i.e., telecommunication products, water, wastewater, petrochemical, etc. In general, due to short procurement lead times, U.S. exporters are better positioned to bid on public procurements if they have a locally established presence through a representative, distributor, or sales agent.

The Brazilian Consumer Law states that all equipment and products sold in Brazil must have operation manuals and specifications in Portuguese. Aftermarket and technical assistance including spare and replacement parts must also be offered.

Foreign manufacturers usually sell through a local agent or distributor or through a locally established office. Selecting a representative, distributor or manufacturing partnership with locally established companies can facilitate U.S. exporter entrance into the market, since market knowledge, end-user contacts and qualified management are very important in obtaining market share in Brazil.

U.S. firms should consult with local law firms when signing an agent or distribution contract with a Brazilian partner. General Brazilian commercial law regulates commercial distribution contracts; however, specific legislation regulates the relationship between the foreign company and the Brazilian agent. Although the U.S. company and its local agent are free to negotiate contract clauses, there are laws that govern this relationship. By law, the indemnization payable to the agent in case of contract termination is usually favorable to the agent.

Due to the large size of the country, agents and distributors usually cover specific regions. In some cases, depending on the company's sales structure, an agent or distributor may have nationwide coverage.

The most usual payment terms are: Payment in Advance, Cash against Document, Confirmed Letters of Credit for higher value imports, Open Account (although not generally recommended.)

Upcoming Trade Shows

Futurecom 2005 - http://www.futurecom.com.br
October 24-27, 2005
Centro de Convenções CentroSul
Florianópolis, SC

Telexpo 2006 – http://www.telexpo.com.br
March 7-10, 2006
Expo Center Norte
São Paulo, SP

Resources

For more reports on this sector in other countries, please visit Export.gov's site for US Commercial Service Market Research Worldwide: http://www.export.gov/marketresearch.html

Anatel www.anatel.gov.br

Brazil's Ministry of Communications www.mc.gov.br

For more information about this sector, contact U.S. Commercial Service Commercial Specialist Ebe Raso at ebe.raso@mail.doc.gov.

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